

435.36  
02/08/98  
Rev. 00

## NEW SITE IDENTIFICATION

**Part A - To Be Completed By Observer**

1. Person Initiating report: D. E. Raunig

Phone: 526-5501

Contractor WAG 3 Manager: C. S. Evans *dlc 3/8/99*

Phone: 526-1493

2. Site Title: Tank Farm Interstitial Soils / ~~ICA~~-96 *CPP*

3. Describe the conditions that indicate a possible inactive or unreported waste site. Include location and description of suspicious condition, amount or extent of condition and date observed. A location map and/or diagram should be included to help with the site visit.

The purpose of this new site identification form is to acknowledge the existence of the interstitial soil contamination at the ICPP Tank Farm, (see attachment 1.). By developing the new site, (~~ICA~~-96), the human health and environmental risks associated with the interstitial soil can be assessed. *CPP dlc 3/8/99*

The ICPP Tank Farm area contains contaminated soil with radioactive and potentially listed constituents. The known release sites within the Tank Farm area have been identified as environmentally controlled areas (ECAs). However, not all of the contaminants are contained within the confines of the identified ECAs. Distributed throughout the Tank Farm soil low concentrations of contaminants exist at varying locations and depths. The contaminants in the soil that are not within the boundaries of existing ECAs are identified as the interstitial soils.

Several factors have contributed to the distribution of contamination in the soil that comprises the interstitial soils site. Factors include the following list.

1. Accidental releases and leaks through ICPP process piping.
2. Cross contamination through ICPP operational and maintenance excavations.
3. Fallout from years of operating the ICPP main stack.
4. Migration of contamination from ICPP Tank Farm valve boxes and vault sumps, via vent tubes prior to 1970.
5. Wind blown contamination from releases outside the Tank Farm.

**Part B - To Be Completed By Contractor WAG Manager**

4. Recommendation:

☒ This site meets the requirements for an inactive waste site, requires investigation, and should be included in the INEEL FFA/CO Action Plan. Proposed Operable Unit assignment is included in the FFA/CO.

WAG: 3

Operable Unit: 3-14

☐ This site DOES NOT meet the requirements for an inactive waste site, DOES NOT require investigation, and should NOT be included in the INEEL FFA/CO Action Plan.

5. Basis for the recommendation:

The basis for including the Tank Farm interstitial soils as a new FFA/CO, CERCLA site includes the following logic.

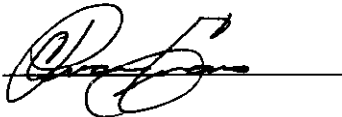
In the process of completing the Tank Farm Upgrade project large segments of the Tank Farm were excavated. During excavation the soils were, segregated, stockpiled and for the most part placed back into the Tank Farm area. However, due to the contiguous nature of the existing contamination, the mixing of soil during excavation and the high radiation fields of the area, it was determined that most areas within the Tank Farm contain some varying degree of contamination at potentially regulated concentrations.

The Tank Farm interstitial soils are believed to represent a potential threat to human health and the environment. The area is known to contain radioactive and potentially listed contaminants, (see attachment 2 for potential listed Tank Farm codes). The codes are subject to change per regulator negotiation. The contamination is believed have originated from past releases to the soil column from Tank Farm process piping along with other plant processes and releases. The interstitial soils with in the ICPP Tank Farm area are not are not managed under the RCRA or CERCLA programs. The source of most of the contamination in the soil is believed to have originated from release sites that have since been included in the CERCLA program, via the FFA/CO agreement. Therefor, it is recommended by the LMITCO Environmental Restoration Soils Department that the interstitial soils be included as a new site to the FFA/CO.

Limited data is available on the Tank Farm soils and additional data would be required for risk assessment purposes, (see attachment 3, summary of same source boxed soil data).

6. Contractor WAG Manager Certification: I have examined the proposed site and the information submitted in this document and believe the information to be true, accurate, and complete. My recommendation is indicated in Section 4 above.

Name: C.S. Evans

Signature: 

Date: 3/12/88

**Part C - To Be Completed By DOE WAG Manager**

7. DOE WAG 3 Manager Concurrence: T. W. Jenkins

WAG 3 Operable Unit:

☒ Concur with recommendation.

☐ Do not concur with the recommendation. Explanation follows:

Name: T. W. Jenkins

Signature: 

Date: 3/13/98

**Part D - To Be Completed By the INEEL FFA/CO Responsible Program Managers (RPM's)**

8. FFA/CO RPM 's Concurrence:

☒ Concur with recommendation.

☐ Do not concur with the recommendation. Explanation follows:

For DOE-ID

Name: Kahleen Hain

Signature: Kathleen E Hain

Date: 3/13/98

For EPA Region X

Name: Wayne Pierre

Signature: Wayne Pierre

Date: 9/3/98

For State of Idaho

Name: Dean Nygard

Signature: Dean J. Nygard

Date: 10/16/98

From: Talley W Jenkins@Exchange on 03/08/99 11:13 AM

To: Debra L Ellis/DLG/LMITCO/INEEL/US@INEL, Paul W Arpke/AWP/LMITCO/INEEL/US@INEL  
cc: Robert E James/JAMERE/LMITCO/INEEL/US@INEL, Carol S Evans/EVANCS/LMITCO/INEEL/US@INEL,  
Talley W Jenkins@Exchange, Kathleen E Hain@Exchange

Subject: New Site Identification forms for WAG 3

The New Site Identification (NSI) forms for site CPP-96, -97, -98, and -99 are to be added to operable unit (OU) 3-13. Site CPP-96 is part of Group 1 and sites CPP-97, -98, and -99 are part of Group 3. Following signature of the OU 3-13 Record of Decision, site CPP-96 along with the rest of Group 1 will be OU 3-14 work scope for a final decision.

If you have questions, let me know.

Thanks,

Talley

Attachment 1.

HEMLOCK STREET

CEEDAR STREET

HEMLOCK STREET

OLIVE AVENUE

FIR STREET

OLIVE AVENUE

BEECH STREET

654

699

659

664

TB-6

26

189

190

187

188

743

32B

694

1607

633

Interstitial Soils ECA-96

763

634

722

31

183

181

79

28

20

25

604

605

604

58A

649

58B

756

701-B

701-A

701

717-D

717-C

717-B

717-A

619

618

721

628

622

738

638

737

739

723

791

765

795

T-2

T-3

760

754

753A

753

750

709

616

630

710

**Attachment 2.**

**Historical Discharge Codes Associated with the PEW System**

Substances known to have been discharged to the PEW and High Level Liquid Waste Tank Farm. Listed Waste Determination Report, WINCO 1132, June 1993.

F-, P-, and U- listed

Substance	CAS #	RCRA
1,1,1 - Trichloroethane	71-55-6	F002
1,1,2 - Trichloroethane	79-00-5	F002
Carbon Tetrachloride	56-23-5	F002
Methylene Chloride	75-09-2	F002
Tetrachloroethylene	127-18-4	F002
Toluene	108-88-3	F002
Trichloroethylene	79-01-6	F002
Benzene	71-43-2	F005
Carbon Disulfide	75-15-0	F005
Isobutyl Alcohol	78-83-1	F005
Methyl Ethyl Ketone	78-93-3	F005
Pyridine	110-86-1	F005
Potassium Cyanide	151-50-8	P098
Silver Cyanide	506-64-9	P104
Sodium Azide	26628-22-8	P105
Sodium Cyanide	143-33-9	P106
Ammonium Vanadate	7803-55-6	P119
Vanadium Oxide	1314-62-1	P120
Acetonitrile	75-05-8	U-003
Analine	62-53-3	U012
Benzene	71-43-2	U019
Chloroform	67-66-3	U044
Methylene Chloride	75-09-2	U080
1,4-Dioxan	123-91-1	U108
Formaldehyde	50-00-0	U122
Formic Acid	64-18-6	U123
Hydrazine	302-01-2	U133
Hydrogen Fluoride	7664-39-3	U134
Methyl Ethyl Ketone	78-93-3	U159
Phenol	108-95-2	U188
Pyridine	110-86-1	U196

Selenium Dioxide	7783-00-8	U204
Tetrachloroethylene	127-18-4	U210
Carbon Tetrachloride	56-23-5	U211
Thiourea	62-56-6	U219
Toluene	108-88-3	U220
1,1,1-Trichloroethane	71-55-6	U226
1,1,2-Trichloroethane	79-00-5	U227
Trichloroethylene	79-01-6	U228



Attachment 3.

These soils were placed in boxes and stockpiles. The 100 cpm — 3 mrem/hr soil stockpile was sampled and analyzed for total metals and radionuclides. Based upon the "20X" rule (developed by EPA) which converts total metal to TCLP metals concentrations based upon sample size and dilution factors, none of the metal sample results exceeded the TCLP limit, therefore, this stockpile is not considered to have characteristic hazardous waste. The following table summarizes the detected radionuclides which are considered to be COPCs by virtue of the maximum value exceeding the site background levels.

Analyte	Average (mg/kg or pCi/g)	Standard Deviation (mg/kg or pCi/g)	Number of Sample Detects	Maximum (mg/kg or pCi/g)	Minimum (mg/kg or pCi/g)
Sr-90	58.9	93.9	11	330	6.6
Pu-238	0.22	0.11	9	0.43	0.11
Am-241	0.12	0.08	2	0.17	0.06
Np-237	0.13	0.03	7	0.17	0.10
Tc-99	1.5	0.4	11	2.2	0.9
Co-60	0.09	NA	1	0.09	0.09
Cs-134	0.16	0.04	2	0.19	0.13
Cs-137	34.0	32.5	11	114	3.81
Eu-154	0.84	NA	1	0.48	0.48